WE CLAIM:

1. A process for preparing a calcined zirconia extrudate comprising the steps of:

a. preparing a shapable dough which comprises mixing and kneading a particulate zirconia with a solvent to obtain a mixture having a total solids content of from about 50% to about 85% by weight,

b. extruding the shapable dough to form a zirconia extrudate, and

c. drying and calcining the zirconia extrudate;

wherein the particulate zirconia comprises no more than about 15% by weight of zirconia which is other than monoclinic zirconia.

2. A process for preparing a calcined cobalt/zirconia extrudate comprising the steps of:

a. preparing a shapable dough which comprises mixing and kneading a particulate zirconia and a cobalt precursor with a solvent to obtain a mixture having a solids content of from about 50% to about 85% by weight,

b. extruding the shapable dough to form a zirconia/extrudate, and

c. drying and calcining the zirconia/cobalt extrudate;

wherein the particulate zirconia comprises no more than about 15% by weight of zirconia which is other than monoclinic zirconia.

3. A process according to Claim 2 wherein the cobalt precursor is selected from the group consisting of cobalt hydroxide, cobalt acetate, cobalt nitrate, cobalt oxide and mixtures thereof.

4. A process according to Claim 3 wherein the cobalt precursor is cobalt hydroxide.

5. A process according to any of Claim 1 wherein the total solids content of the shapable dough is in the range of from about 55% to about 80% by weight.

6. A process according to Claim 5 wherein the total solids content of the shapable dough is in the range of from about 65% to about 75% by weight.

7. A process according to Claim 1 wherein the particulate zirconia comprises no more than about 10% by weight of zirconia which is other than monoclinic zirconia.

8. A calcined zirconia extrudate prepared according to the process of Claim 1.

9. A calcined zirconia/cobalt extrudate prepared according to the process of Claim 2.

10. A process for preparing a calcined cobalt-impregnated zirconia extrudate which comprises the steps of:

a. preparing a shapable dough which comprises mixing and kneading a particulate zirconia with a solvent to obtain a mixture having a total solids content of from about 50% to about 85% by weight,

b. extruding the shapable dough to form a zirconia extrudate,

c. impregnating the zirconia extrudate with a liquid cobalt precursor to form a cobalt-impregnated zirconia extrudate, and

d. drying and calcining the cobalt-impregnated zirconia extrudate;

wherein the particulate zirconia comprises no more than about 15% by weight of zirconia which is other than monoclinic zirconia.

11. A process according to Claim 10 wherein the liquid cobalt precursor is an aqueous solution of a cobalt salt selected from the group consisting of cobalt nitrate, cobalt acetate, cobalt hydroxide, and mixtures thereof.

12. A calcined cobalt impregnated zirconia extrudate prepared according to Claim 10.

13. A calcined zirconia extrudate having the following characteristics:

a. a pore volume of about 0.3 ml/g or greater;

b. a radial crush strength of about 100 N/cm or greater; and

c. a surface area of about 50 m2/g or greater.

14. Process for the preparation of higher olefins having from 11 to 14 carbon atoms comprising contacting hydrogen and carbon monoxide under Fischer-Tropsch reaction conditions in the presence of the catalyst of Claim 9 or a calcined cobalt-impregnated zirconia extrudate according to Claim 12.

15. Process for the preparation of higher olefins having from 11 to 14 carbon atoms comprising contacting hydrogen and carbon monoxide under Fischer-Tropsch reaction conditions in the presence of the catalyst of Claim 12.

16. Process for the preparation of higher olefins having from 11 to 14 carbon atoms comprising contacting hydrogen and carbon monoxide under Fischer-Tropsch reaction conditions in the presence of the catalyst catalyst of Claim 9 or a calcined cobalt-impregnated zirconia extrudate according to Claim 13.

17. A process according to Claim 14 wherein the catalyst comprises from about 3 to about 100 parts by weight of cobalt.

18. A process according to Claim 15 wherein the catalyst comprises from about 3 to about 100 parts by weight of cobalt.

19. A process according to Claim 16 wherein the catalyst comprises from about 3 to about 100 parts by weight of cobalt.

20. A process according to Claim 14 wherein the catalyst has an average particle size of 2.2 mm or less.

21. A process according to Claim 15 wherein the catalyst has an average particle size of 2.2 mm or less.

22. A process according to Claim 16 wherein the catalyst has an average particle size of 2.2 mm or less.

23. The process of Claim 14 wherein the amount of catalytic reactive cobalt on the zirconia carrier is preferably in the range from about 3 to about 300 parts by weight for 100 parts by weight of zirconia carrier material.

24. The process of Claim 15 wherein the amount of catalytic reactive cobalt on the zirconia carrier is preferably in the range from about 3 to about 300 parts by weight for 100 parts by weight of zirconia carrier material.

25. The process of Claim 16 wherein the amount of catalytic reactive cobalt on the zirconia carrier is preferably in the range from about 3 to about 300 parts by weight for 100 parts by weight of zirconia carrier material.